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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,131	06/15/2001	John Russell Watts	50021-00001	8204
23373	7590	11/03/2003	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037			LUGO, CARLOS	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/883,131

Applicant(s)

WATTS, JOHN RUSSELL

Examiner

Carlos Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on August 25, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-39 is/are allowed.
- 6) ☒ Claim(s) 40,42-46,48-53 and 56-58 is/are rejected.
- 7) ☒ Claim(s) 47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is in response to applicant's request for continuing examination filed on August 25, 2003.

#### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cam including opposing pairs of shoulders, as claimed in claim 40 must be shown or the feature(s) canceled from the claim(s). The drawings only show a cam including a single pair of shoulders. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
4. **Claim 44 is rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44 recites the limitation "the angular disposition of the first cam portion" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 42-46,49-51,53 and 57 are rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,998,422 to Borgmann et al (Borgmann).

Regarding claims 42 and 51-53, Borgmann discloses a padlock (10) including a shackle (14) having a short leg (26) comprising a first locking recess (32) and a longer leg (30) comprising an opposed second locking recess (32). The longer leg is connected by a longitudinally elongated recess or flat to a peripheral recess (34) disposed towards the end of the longer end.

A casing (12) has a short and a longer recess (36 and 38) extending into the casing from a first end surface to accept the short and longer shackle leg respectively. A central recess (142) extends into the casing from an opposed second end surface. An offset recess (141) extends into the casing from the opposed second end surface and intersects the central recess. The intersection defines a first and second longitudinally elongated cusp portions. A transverse recess (42) extends into the casing from a first side of the casing.

A cylinder (16) has a key operable barrel characterized by an undisplaced position enabling key removal.

The transverse recess supports two opposed balls (20). A first ball is able to protrude into the short recess and first locking recess and a second ball to protrude into the longer recess and second locking recess.

A cam (64) includes a first cam position (70) to control the balls and a cam drive portion that includes opposed drive recess (in front of 82 and 84, Figure 5) and opposed drive shoulders (82 and 84).

The cam is operable by the barrel through an interspaced couplar (24) that projects into the drive recess (at 84) of the cam while being supported in the barrel drive recess to provide a Type 2 padlock.

The cam is operable by the barrel through an interspaced couplar (24) that projects into the drive recess (at 82) of the cam while being supported in the barrel drive recess to provide a Type 1 padlock.

The Type 1 padlock is characterized by an open configuration where the short leg is free of the casing, the longer leg is supported in the casing and the key is removable, and the Type 2 padlock is characterized by an open configuration where the short leg is free of the casing, the longer leg is supported in the casing and the key and the barrel cannot be rotated to the undisplaced position to enable key removal.

As to claim 43, Borgmann discloses that the cam includes first and second unlocking recesses (70).

As to claim 44, Borgmann discloses that the angular disposition of the first cam portion (70) is determined by a stop member (62).

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As to claims 45 and 46, Borgmann discloses that in the Type 1 padlock, the coupler moves the cam to the unlocking configuration and the barrel and the key is removable and in a Type 2 padlock, wherein the coupler moves the cam to the unlocking configuration and the barrel and the key is restrained.

As to claim 49, Borgmann discloses that the padlock includes a torsion spring (60) to moves the cam towards the locking configuration.

As to claim 50, Borgmann discloses that the padlock includes a compression spring within the longer recess (Figure 1).

As to claim 51, Borgmann discloses that the cylinder (16) is removable (Col. 4 Lines 27 and 28).

As to claim 57, Borgmann discloses that the peripheral recess comprises a peripheral channel (34) around the periphery of the shackle body.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 40,48,52,56 and 58 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,998,422 to Borgmann et al (Borgmann) in view of US Pat No 5,377,511 to Meckbach.

Regarding claims 40 and 48, Borgmann discloses a padlock (10) including a shackle (14) having a short leg (26) comprising a first locking recess (32) and a

longer leg (30) comprising an opposed second locking recess (32). The longer leg is connected by a longitudinally elongated recess or flat to a peripheral recess (34) disposed towards the end of the longer end.

A casing (12) has a short and a longer recess (36 and 38) extending into the casing from a first end surface to accept the short and longer shackle leg respectively. A central recess (142) extends into the casing from an opposed second end surface. An offset recess (141) extends into the casing from the opposed second end surface and intersects the central recess. The intersection defines a first and second longitudinally elongated cusp portions. A transverse recess (42) extends into the casing from a first side of the casing.

A cylinder (16) has a key operable barrel characterized by an undisplaced position enabling key removal.

The transverse recess supports two opposed balls (20). A first ball is able to protrude into the short recess and first locking recess and a second ball to protrude into the longer recess and second locking recess.

A cam (58) controls the balls. The cam has an angular disposition in the locking and unlocking configurations being determined by a stop (62) comprising a disc-like member (136) having a stop shoulder (88).

The padlock is characterized in that in an open configuration where the short leg is free of the casing, and in a closed configuration wherein the short leg is free of the casing and the longer leg is supported in the casing.

The cam further includes a first cam position (72) to control the balls and a cam drive portion that includes at least one drive recess (82) defined between a spaced drive shoulder (66) and at least one additional drive recess (84).

However, Borgmann fails to disclose that the cam includes first, second and third unlocking recesses. Borgmann discloses that the cam only includes first and second unlocking recesses.

Meckbach teaches a padlock having a cam member (25) that includes first, second and third unlocking recesses (26 and 33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cam with first, second and third unlocking recesses, as taught by Meckbach, into a padlock as described by Borgmann, in order to take out the shackle from the casing.

As to claim 52, Borgmann fails to disclose that the cylinder is retained in the casing by a threaded fastener.

Meckbach teaches the use of a threaded fastener (23) to retain a cylinder (3) in a casing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a threaded fastener, as taught by Meckbach, into a padlock device as described by Borgmann, in order to retain the cylinder in the casing.

As to claims 56 and 58, Borgmann fails to disclose that the longitudinally elongated recess comprises a longitudinal channel.



Meckbach discloses the use of a longitudinal channel (14) in the longer leg of the shackle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an elongated channel in the elongated recess, as taught by Meckbach, into a padlock device as described by Borgmann, in order to facilitate the withdraw of the shackle from the padlock.

***Allowable Subject Matter***

9. **Claims 37-39 are allowed.**

10. **Claim 47 is objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

11. Applicant's arguments filed August 25, 2003 have been fully considered but they are not persuasive.

Regarding applicant's arguments that Borgmann fails to disclose "a cam including a first cam portion to control the balls and a cam drive portion that includes opposed drive recess" and "the cam being operable by the barrel through an interspaced coupler that projects into holes" as claimed in claim 42 (Page 22 Line 12), Borgmann illustrates (Figure 5) that the cam including a first cam portion (70) to control the balls and a cam drive portion (66) that includes opposed drive recess (at front of 82 and 84). Also, Borgmann discloses that the cam is operable by the barrel through an interspaced coupler (24) that projects into holes.

As to applicant's arguments that the stop member protrudes into the offset recess (Page 23 Line 4), Borgmann illustrates (Figure 3) that the stop member (part 88) protrudes into the offset recess (141).

As to applicant's arguments that Borgmann fails to disclose the limitations in claim 47 (Page 23 Line 8), applicant is reminded that in the last office action claim 47 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to applicant's arguments that Borgmann fails to disclose that the cam has a removable configuration enabling the removal of the shackle (Page 23 Line 12), Borgmann discloses this limitation (see rejection above).

As to applicant's arguments that Borgmann fails to disclose that the cam includes opposing pair of shoulders separate by a bridge that spans a distance substantial diameter of the bottom of the cam portion (Page 24 Line 1), Borgmann illustrates this limitation. Figure 5 shows a cam (74) that includes a pair of shoulders (82 and 84) separate by a bridge (at 66) and the bridge spans a distance substantial diameter of the bottom of the cam portion.

As to applicant's arguments that there is not reasonable expectation of success in the combination of Borgmann with the teachings of Meckbach (Page 24 Line 16), the fact that the cam includes a third recess is not new in the art.

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**Conclusion**


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number is 703-305-9747. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

Carlos Lugo  
Examiner  
Art Unit 3677

October 27, 2003.

  
ROBERT J. SANDY  
PRIMARY EXAMINER